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Education

Clemson University: 2016-2019
Ph.D. Mathematical Sciences (emphasis statistics): 2019
Dissertation Advisor: Dr. Christopher McMahan

Clemson University: 2014-2016
M.S. Mathematical Sciences (emphasis statistics): 2016
Thesis Advisor: Dr. Christopher McMahan

Furman University: 2010-2014
B.S. Mathematics: 2014

Professional Experience

University of South Carolina: 2019-present
Assistant Professor, Department of Epidemiology and Biostatistics, Arnold School of Public Health

Clemson University: 2022-present
Graduate Faculty, Department of Forestry and Environmental Conservation, College of Agriculture, Forestry and Life Sciences

University of South Carolina School of Medicine Greenville: 2020-present
Adjunct Assistant Professor, Department of Biomedical Sciences

Clemson University: 2016 - 2019 (Fall and Spring Semesters)
Graduate Research Assistant funded by the Companion Animal Parasite Council

Clemson University: Summer 2018
Data Science Core Research Associate for the Greenvile Health System

Clemson University: 2014-2015 (Year Round), 2016-2017 (Summer Semesters)
Graduate Teaching Assistant

Furman University: Summer 2012 & Summer 2013
Undergraduate Research Assistant

Current Research Interests

Bayesian statistics, group testing, infectious disease forecasting, spatial clustering, Markov chain Monte Carlo methods, spatio-temporal modeling

Publications

Students for whom I was the primary project mentor are <u>underlined</u>.
† *Denotes student for whom I served as a committee chair/member*
Denotes corresponding author

Submitted Papers

1. <u>McCarter M.</u>†, **Self S.**, Li H., Gual-Gonzalez L., Kanyangarara M., and Nolan M. Validating a Bayesan Spatio-temporal Model to Predict La Cross Virus Human Incidence in the Appalachian Mountain Region, USA. *Journal of Vector Ecology*. Under review.

2. <u>McCarter M.</u>†, **Self S.**, Ewing A., Kanyangarara M., Gunter A., and Nolan M. The Evolution of Public Health Statistical Modelling Approaches and How to Advance their Incorporation into Modern Arboviral Surveillance. *Journal of Medical Entomology*. Under review.

3. <u>Promiti A.</u>, Slee K., **Self S.,** Seawright E., Ewing A., and Obeysekare J. The association between attendance at the postpartum visit with postpartum depression: A cross-sectional study with implications for pediatric practice. *BMC Pediatrics*, under review.

4. Martin B., **Self S.,** Schammel C., and Devane M. The Utility of Adrenal Vein Sampling in the Diagnosis and Treatment of Patients with Primary Aldosteronism. *Clinical Radiology*, under review.

5. Russell M., Lewis D., Raghavan R., Rahman T., Jasper Z., **Self S.,** Reddic J., Gray B. Schammel C., and A Devane A. Impact of Common Comorbidities on Outcome of COVID-19 Patients with DVT. *Journal of Infection and Chemotherapy*, under review.

6. Dyckman C., **Self S.**, White D., Overby A., Ogletree S., Fouch N., Lauria M., Baldwin R. Going with the Grain: Scalar Conservation Easement Dataset Comparison. *Landscape Ecology*, in revision.

7. Gupta D.†, Darin T., **Self S**, Edward F., Alain L., Ewing A., Ramos-Gonzalez L., Rudisill C. Impact of resource navigation to address food insecurity in patients with diabetes and hypertension. *Journal of General Internal Medicine*, under review.

8. Costilla E., Teasley B., <u>Zhoa X.</u>†, Gormley M., Troise M., Blackwell T., Lutz M., Cobb M., **Self S.**, Schwerin D. Emergency medical technicians can administer nitrous oxide for effective analgesia in an urban multi-tiered EMS system. *Hospital Emergency Care*, under review.

9. Blake M., Schammel C., **Self S.,** and Devane M. The Utility of Adrenal Vein Sampling in the Diagnosis and Treatment of Patients with Primary Aldosteronism. *Clinical Endocrinology*, in revision.

10. Able W., Pike J., Seckel T., **Self S.,** Schammel C., Schammel D. and Trocha S. Gastrointestinal stromal tumors: Comprehensive evaluation of surgical approaches from a single institution. *Journal of Gastrointestinal Surgery*, under review.

11. Dyckman C., **Self S.**, Lauria M., White D., Fouch N., Ogletree S., Overby A., and Baldwin R. The Conservation Easement Clustering Patterns in U.S. Exurban Counties. *Frontiers in Environmental Science: Land Use Dynamics*, under review.

Methods Papers

1. Huang R.[†], McMahan C., Herrin B., McLain A., Cai B., and **Self S.**[*] Gradient Boosting: A Computationally Efficient Alternative to Markov Chain Monte Carlo Sampling for Fitting Large Bayesian Spatio-Temporal Binomial Regression Models. (2024) *Infectious Disease Modelling* 10(1), https://doi.org/10.1016/j.idm.2024.09.008.

2. Huang R.[†], McLain A., Herrin B., Nolan M., Cai B., and **Self S**[*]**.** Bayesian Group Testing Regression Models for Spatial Data. (2024) *Spatial and Spatio-temporal Epidemiology* 50, https://doi.org/10.1016/j.sste.2024.100677.

3. **Self S.**[*], Zhao, X.[†], Zgodic A., Overby A., White D., McLain A., and Dyckman D. A Hypothesis Test for Detecting Spatial Patterns in Categorical Areal Data. (2024) *Spatial Statistics* 61, https://doi.org/10.1016/j.spasta.2024.100839.

4. **Self S.**[*], Yang Y., Walden H., Yabsley M., McMahan C., and Herrin B. A Nowcast Model to Predict Flea Activity in Real Time for the Contiguous United States. (2024) *Parasites & Vectors*, 17(27), 10.1186/s13071-023-06112-5.

5. **Self S.**[*] and Nolan M. A Bayesian Spatial Scan Statistic for Multinomial Data. (2024) *Statistics and Probability Letters* 206, https://doi.org/10.1016/j.spl.2023.110005.

6. **Self S.**[*]**,** Overby A., Zgodic A., White D., McLain A., and Dyckman C. A hypothesis test for detecting distance-specific clustering and dispersion in areal data. (2023) *Spatial Statistics* 55, doi.org/10.1016/j.spasta.2023.100757.

7. **Self S.**[*], Huang R.[†], Amin S., Ewing J., Rudisill C., and McLain A. A Bayesian susceptible-infectious-hospitalized-ventilated-recovered model to predict demand for COVID-19 inpatient care in a large healthcare system. (2022) *PLOS ONE* 12(17), https://doi.org/10.1371/journal.pone.0260595.

8. **Self S.**[*]**,** McMahan C., and Mokalled S. Capturing the pool dilution effect in group testing regression: A Bayesian approach. (2022) *Statistics in Medicine*, 41(23), https://doi.org/10.1002/sim.9532.

9. McMahan S., **Self S.**, Rennert L., Kalbaugh C., Kriebel D., Graves D., Colby, C., Deaver J., Popat S., Karanfil T., and Freedman D. COVID-19 wastewater epidemiology: A model to estimate infected populations. (2021) *The Lancet Planetary Health*, 5(12), https://doi.org/10.1016/S2542-5196(21)00230-8.

10. **Self S.**[*], McMahan C., and Russell B. Identifying meteorological drivers of $PM_{2.5}$ levels via a Bayesian spatial quantile regression. (2021) *Environmetrics*, 32, doi: https://doi.org/10.1002/env.2669.

11. Brown D., McMahan C., and **Watson S.** Sampling strategies for fast updating of Gaussian Markov random fields. (2019) *The American Statistician* , doi:10.1080/00031305.2019.1595144.

12. **Self, S.**, McMahan C., Brown D., Lund R., Gettings J., and Yabsley M. A large scale spatio-temporal binomial regression model for estimating seroprevalence trends. (2018) *Environmetrics*, 29, doi:10.1002/env.2538.

13. **Watson S.**, Liu Y., Lund R., Gettings J., Nordone S., McMahan C., and Yabsley M. A Bayesian spatio-temporal model for forecasting the prevalence of antibodies to *Borrelia burgdorferi*, causative agent of Lyme disease, in domestic dogs within the contiguous United States. (2017) *PLOS ONE*, 12(5), doi:10.1371/journal.pone.0174428.

14. Liu Y., **Watson S.**, Lund R., Gettings J., Nordone S., Yabsley M., and McMahan C. A Bayesian spatio-temporal model for forecasting *Anaplasma* species seroprevalence in domestic dogs within the contiguous United States. (2017) *PLOS ONE*, 12(7), doi:10.1371/journal.pone.0182028.

15. Farnsworth J., Isaac R., and **Watson S.** The geometry of the Narayana fractal. (2013) *SIAM Undergraduate Research Online*, 6, doi:10.1137/13S012303.

Applied/Collaborative Papers

Infectious Disease

16. Lynn M.[†], Aquino S., Rivas P., Miranda X., Romero D., Cowan H., Meyer M., Godoy W., Kanyangarara M., **Self S.**, Campbell B., and Nolan M. Employing digital PCR for enhanced detection of *Toxoplasma gondii* infection: A cross-sectional surveillance and maternal-infant outcomes study in El Salvador. *PLOS Neglected Tropical Diseases*, accepted.

17. Gual-Gonzalez L., Cantillo-Barraza O., Torres M., Quintero-Velez J., Medina M., Self S., Nolan M. Spotted Fever Group Rickettsia Antibody Seroprevalence in Miraflores, Colombia: A Cross-Sectional Study in Humans and Dogs. (2024) American Journal of Tropical Medicine and Hygiene. doi: 10.4269/ajtmh.23-0593

18. Gual-Gonzalez L.[†], Torres M., **Self S.**, Barraza O., and Nolan M. Spotted Fever Group *Rickettsia* spp. Molecular and Serological Evidence Among Colombian Vectors and Animal Hosts: A Historical Review. (2024) *Insects* 15(3), doi: 10.3390/insects15030170.

19. Lynn M.[†], Aquino S., Rivas P., Kanyangarara M., **Self S.**, Campbell B., and Nolan M. Perinatal dengue and zika virus seroprevalencce and maternal-fetal outcomes among El Salvadoran women presenting for labor-and-delivery. (2024) *Maternal Health, Neonatology and Perinatology* 10(1), doi: 10.1186/s40748-024-00177-5.

20. Gual-Gonzalez L.[†], **Self S.**, Zellars K., Meyer M., Dye-Braumuller K., Evans C., Cantillo-Barraza O., Torres M., and Nolan S. The eco-epidemiology of *Rickettsia amblyommatis* and *Rickettsia parkeri* in naturally infected ticks (Acari: Ixodida) from South Carolina. (2024) *Parasites & Vectors* 17, https://doi.org/10.1186/s13071-023-06099-z.

21. Gual-Gonzalez L.[†], **Self S.**, Meyer M., Cantillo-Barraza O., Torres M., and Nolan S. Human Spotted Fever Group *Rickettsia* Seroprevalence and Associated Epidemiologic Factors Among Diverse, Marginalized Populations in South Carolina. (2024) *Ticks and Tick-Borne Diseases* 15(2), doi: 10.1016/j.ttbdis.2023.102288.

22. McCarter M.[†], **Self S.,** Braumuller K., Lee C., Li H., Nolan, M. The Utility of a Bayesian Predictive Model to Forecast Neuroinvasive West Nile Virus Disease in the United States, 2022. (2023) *PLOS ONE* 18(9), doi: 10.1371/journal.pone.0290873.

23. Lynn M.[†], Aquino S., **Self S.**, Kanyangarara M., Campbell B., Nolan S. TORCH congenital syndrome infections in Central America's northern triangle. (2023) *Microorganisms* 11(2), 10.3390/microorganisms11020257.

24. Lynn M.[†], Aquino S., Rivas P., Kanyangarara M., **Self S.**, Campbell B., and Nolan M. Chagas disease maternal seroprevalence and maternal-fetal health outcomes in a parturition cohort in western El Salvador. (2023) *Tropical Medicine and Infectious Diseases* 8(4), https://doi.org/10.3390/tropicalmed8040233.

25. Dye-Braumuller C. K.[†], Lynn M. K.[†], Cornejo Rivas P. M., Rodriguez Aquino M. S., Chandler J. G., Trout Fryxell R. T., **Self, S.,** Kanyangarara M., Lee C., Valafar H., Nolan M. S. First report of multiple *Rickettsia* spp., *Anaplasma* spp., and *Ehrlichia* spp. in the San Miguel Department of El Salvador from zoonotic tick vectors. (2023) *Acta Tropica*, 242, https://doi.org/10.1016/j.actatropica.2023.106909.

26. Sellers S., Gosnell E., Bryant D., Belmonte S., <u>McCarter M.</u>[†], **Self S.**, Kennedy K., and Norman S. Building-level wastewater surveillance of SARS-CoV-2 is associated with transmission and variant trends in a university setting. (2022) *Environmental Research*, 215 doi: 10.1016/j.envres.2022.114277.

27. Dye-Braumuller K.[†], Aquino M., Zellars K., Waltz H., Meyer M., Gual-Gonzalez L.[†], **Self, S.**, Kanyangarara M., and Nolan M. Antibody prevalence and risk factors associated with *Rickettsia* spp. in a pediatric cohort: SFGR remains underdiagnosed and underreported in El Salvador, (2022) *Pathogens* 11(11) https://doi.org/10.3390/pathogens11111241.

28. Dye-Braumuller C. K.[†], Rodriguez Aquino M. S., **Self, S.**, Kanyangarara M., Nolan M. S. Spotted Fever Group Rickettsioses in Central America: The Research and Public Health Disparity among Socioeconomic Lines. (2022) *Insects* 13(8) https://doi.org/10.3390/insects13080674.

29. Nolan M., Daguise V., Davis M., Duwve J., Sherrill W., Heo M., Litwin A., Mufaro K., **Self S.,** <u>Huang R.</u>[†], Eberth J., Gonzalez L.[†], Lynn M.[†], and Korte J. SARS-CoV-2 viral incidence, antibody point prevalence, associated population characteristics and vaccine attitudes- South Carolina, February 2021. (2022) *Public Health Reports*, 137(3), 10.1177/00333549221081128.

30. Gual-Gonzalez L.[†], <u>McCarter M.</u>[†], Dye-Braumuller K.[†], **Self S.**, Ross C., Rodriguez-Ramos C., Daguise V., Nolan M. Determinants of COVID-19 vaccinations among a state-wide year-long surveillance initiative in a conservative Southern state. (2022) *Vaccines*, 3(10), https://doi.org/10.3390/vaccines10030412.

31. Gettings J., **Self S.,** McMahan C., Brown D. A., Nordone S., and Yabsley M. Regional and local temporal trends of *Borrelia burgdorferi* and *Anaplasma* spp. seroprevalence in domestic dogs: Contiguous United States 2012-2019. (2020) *Frontiers in Veterinary Science*, 7, doi: 10.3389/fvets.2020.561592.

32. Gettings J., **Self S.**, McMahan C., Brown D., Nordone S., and Yabsley M. Regional and local temporal trends of canine *Ehrlichia* species seroprevalence in the United States, 2012-2018. (2020) Parasites & Vectors, 13(153), doi: 10.1186/s13071-020-04022-4.

33. **Self S.**, Pulaski C., McMahan C., Brown D., Yabsley M., and Gettings J. Regional and local temporal trends in the prevalence of canine heartworm infection: 2012-2018. (2019) *Parasites & Vectors*, 12(1), doi:10.1186/s13071-019-3633-2.

34. **Self S.**, Liu Y., Nordone S., Yabsley M., Walden H., Lund R., Bowman D., Carpenter C., McMahan C., and Gettings, R. Canine vector-borne disease: Mapping and the accuracy of forecasting using big data from the veterinary community. (2019) *Animal Health Research Reviews*, 20(1), doi:10.1017/S1466252319000045.

Social Determinants of Health

35. Kilpatrick D., Hung P., Crouch E., **Self S.**, Cothran J., Porter D., and Eberth J. Geographic Variations in Urban-Rural Particulate Matter (PM2.5) Concentrations in the United States, 2010-2019. *GeoHealth*, accepted.

36. Rudisill C., Eicken M., Gupta D.[†], Macauda M., **Self S.**, Kennedy A., Thomas D., Kao E., Jeanty M., Hartley J. Patient and Care Team Perspectives on Social Determinants of Health Screening in Primary Care: A Qualitative Study. (2023) *JAMA Network Open* 6(11), doi:10.1001/jamanetworkopen.2023.45444

37. <u>DeMass R.</u>[†], Gupta D.[†], **Self S.***, Darin T., and Rudisill C. Emergency department use and geospatial variation in social determinants of health: A pilot study from South Carolina. (2023) *BMC Public Health* 23(1527), https://doi.org/10.1186/s12889-023-16136-2.

38. Zahnd W., Silverman A., **Self S.,** Hung P., Natafgi N., Arp Adams S., Merrell M., Owens O., Crouch E., Eberth J. The COVID-19 pandemic impact on independent and provider-based rural health clinics' operations and cancer prevention and screening provision. (2023) *The Journal of Rural Health* 39, https://doi.org/10.1111/jrh.12753.

39. Gupta D.[†], **Self S.,** Thomas D., Supra J., and Rudisill C. Understanding the Role of a Technology and EMR-based Social Determinants of Health Screening Tool and Community-based Resource Connections in Health Care Resource Utilization. (2023) *Medical Care* 61(7), doi: 10.1097/MLR.0000000000001800.

Other

40. Pratt K., Lordo R., **Self S.**, and Carlson L. Amlodipine versus Nifedipine ER for the Management of Postpartum Hypertension: A Noninferiority Randomized Controlled Trial. *American Journal of Obstetrics and Gynecology Maternal Fetal Medicine*, accepted.

41. Skenteris G., Singletary T., Grasso L., **Self S.,** Schammel D., Schammel C., Jones W., and Devane A. Effectiveness of cholangioscopy guided biopsy versus ERCP guided brushings in diagnosing malignant biliary strictures. *Surgical Endoscopy*, accepted.

42. Dyckman C., McMahan C., Anna O., Fouch N., Ogletree S., **Self S.**, White D., Lauria M., Baldwin R. Unpacking Conservations Easements' Assessed Land Use Designations and their Implications for Realizing Biodiveristy Protection. *Conservation Science and Practice*, accepted.

43. Hill K., Ohning A., Mallory J., **Self S.**, Schammel C., Meredith J., Reddic J., Kent P., Knight, J. Comparing Efficacies of Biopsy and Rapid Urease Testing for *H. pylori* at a Single Institution. (2023) *Advanced Gut and Microbiome Research*, https://doi.org/10.1155/2023/2749199

44. Gormley M., Zhang W., **Self S.**, Ewing J., Heo M., Roth P., Pericot-Valverde I., Rennert R., Akiyama M., Norton B, and Litwin A. Influence of polysubstance use on the health-related quality of life among people who inject drugs undergoing opioid agonist treatment following treatment for hepatitis C virus. (2023) *Journal of Substance Use*, https://doi.org/10.1080/14659891.2023.2254391.

45. Cochrane C., Batson R., Aragon M., Bedenbaugh M., **Self S.**, Isham K., and Eichelberger K. The impact of the "39 week rule" on pregnancy outcomes: A statewide analysis. (2023) *American Journal of Obstetrics and Gynecology, Maternal-Fetal Medicine* 5(4), doi: 10.1016/j.ajogmf.2023.100879.

46. Ngov D., **Self S.,** Schammel S., and Devane M. Radiation exposure during prostatic artery embolization: A single institution review. (2023) *Health Physics* 124(3), doi: 10.1097/HP.0000000000001662.

47. Cochrane C., Batson R., Aragon M., Bedenbaugh M., **Self S.**, Eichelberger K., and Isham K. Impact of restricting early term deliveries on adverse neonatal outcomes: A statewide analysis. (2023) *American Journal of Obstetrics and Gynecology, Maternal-Fetal Medicine* 5(2) https://doi.org/10.1016/j.ajogmf.2022.100797.

48. Schammel N., Vandeater T., **Self S.**, Wilson C., Schammel C., Cowley R., Gault D., and Madeline L. Obstructive sleep apnea and white matter hyperintensities: Correlation or causation? (2022) *Brain Imaging and Behavior*, 16(4), 10.1007/s11682-022-00642-9

49. Perregaux S., **Self S.,** Collins J., Renfro S., VanHale C., Ansari A., McKinlley B., Rippon M., Schammel D., and Schammel C. Breast cancer prevalence and management in Hispanic women: Comparison to black and white women at a regional medical center. (2021) *Archives of Breast Cancer*, 8(2), doi: https://doi.org/10.32768/abc.202182127-136.

50. Fredrick A., Lorenz W., **Self S.,** Schammel C., Bolton W., Stephenson J., and Ben-or S. Delayed gastric emptying post-esophagectomy: A single institution experience. (2020) *Innovations: Technology and Techniques in Cardiothoracic and Vascular Surgery*, 15(6), doi: 10.1177/1556984520961079.

51. Dertien J., **Self, S.,** Baldwin R., Ross B., and Barrett K. The relationship between biodiversity and wetland cover varies across regions of the conterminous United States. (2020) *PLOS ONE* 15(5), https://doi.org/10.1371/journal.pone.0232052.

Policy Briefs

52. Kilpatrick D., Cothran J., Hung P., **Self S.,** Porter D., Eberth J., and Crouch E. Assessing geographic variability in key indicators of air quality: An urban vs. rural comparison of pollution and socio-economic factors. Federal Office of Rural Health Policy Findings Brief. 2023.

53. Zahnd W., Silverman A., **Self S.,** Hung P., Natafgi N., Adams S., Merrell M., Owens O., Crouch E., Eberth J. The impact of the COVID-19 pandemic on rural health clinics' operations and cancer prevention and control efforts. Federal Office of Rural Health Policy Findings Brief. 2022.

Conference Papers

54. Zhou E., **Self S.,** Schammel C., and Knight J. Accurate diagnosis of B cell ALL mutations using karyotyping and fluorescence in-situ hybridization (FISH) in adolescent/young adult and adult populations. Proceedings of the 17th Annual SC Upstate Research Symposium, April 2021.

55. Dyckman C., Overby A., White D., and **Self S.** Understanding CE Instruments in Rapidly Growing Exurban Areas Over Time. Association of Collegiate Schools of Planning Conference. Seattle WA, November 2024.

Presentations

Submitted Abstracts

1. Pooled Testing for Imperfect Multiplex Assays: The Optimal Pool Size for Estimating Coinfections. Joint Statistical Meetings 2025. Nashville TN (August 2025). *Self S.*, Nolan M., Bramlett K., Zellars K. and McMahan C.

2. Amlodipine Versus Nifedipine ER for Managing Postpartum Hypertension: Medication Continuation Beyond 6 weeks Postpartum. 2025 Society for Maternal Fetal Medicine Pregnancy Meeting. Aurora CO (January 2025). Lordo R., Pratt K., **Self S.**, and Carlson L. Accepted for poster presentation.

Invited Presentations

1. Developing New Statistical Methods for Vector-borne disease Surveillance to Improve Accuracy while Reducing Cost, Big Data Health Science Center R25 Trainee Seminar, Virtual (November 2024).

2. R25 Big Data Health Science Fellow Program: Trainee Experience, NIAID R25 Directors Workshop, Virtual (November 2024).

3. An Overview of CAPC's Parasite Risk Indicies, Companion Animal Parasite Council Fall Board Meeting, Dallas TX (September 2024).

4. An Overview of CAPC's Annual Forecasts: History, Accuracy and Future Directions, Companion Animal Parasite Council Summer Board Meeting, Boston MA (June 2023).

5. An Overview of CAPC's Annual Forecasts: History, Accuracy and Future Directions, Companion Animal Parasite Council Spring Board Meeting, Charlotte NC (March 2023).

6. A Closer Look at CAPC's Pet Disease Alerts: Using Big Data to Forecast Risk to Pets, Companion Animal Parasite Council Spring Board Meeting, Charlotte NC (March 2023).

7. Conservation Easements in Exurban Areas Across the US, South Carolina Land Trust Network Summer Meeting, Columbia SC (July 2022). Joint presentation by Dyckman C., White D., **Self S.**, Overby A.

8. Harnessing the power of big data analytics for promoting pet health: A look at CAPC's monthly pet parasite forecasts, Companion Animal Parasite Council Spring Board Meeting, Dallas-Fort Worth TX & virtual (February 2022).

9. Big Data Health Science Fellow Experience, University of South Carolina Big Data Health Science Center Conference, Columbia SC & virtual (February 2022).

10. Using Prisma Health Data to Predict the Demand for COVID-19 Inpatient Care, School of Mathematical and Statistical Sciences Seminar, Clemson University, Virtual due to COVID-19 pandemic (April, 2021).

11. Identifying meteorological variables associated with high $PM_{2.5}$ levels through Bayesian spatial quantile Regression. University of South Carolina-Epidemiology and Biostatistics Departmental Seminar, Columbia SC (November 2019). **Self S.**, McMahan C., Russell, B., and Brown D.

12. A Model for forecasting flea activity. Companion Animal Parasite Council Summer Board Meeting. Atlanta GA (June 2016). **Watson S.**, and McMahan C.

Contributed Presentations

Italics indicates primary presenter

Methods Presentations: Oral

1. Bayesian Spatio-temporal Regression Models for Group Testing Data. Joint Statistical Meetings 2024. Portland OR (August 2024). <u>*Zhao X.*</u>[†], Cai B., McLain A., Wang D., Nolan M., **Self S.**

2. A Bayesian Spatial Scan Statistic for Multinomial Data. Eastern North American Region (ENAR) of the International Biometric Society 2024 Spring Meeting. Baltimore MD (March 2024). **Self S.**, and Nolan M. Note: this presentation was accepted for an oral presentation but due to a family emergency, the presenter was unexpectedly unable to attend the conference

3. A Bayesian Spatio-temporal Regression Model for Group Testing data. American Public Health Association Annual Meeting, Atlanta GA (November 2023). <u>*Zhao X.*</u>[†], Nolan M., and **Self S.** Round table presentation.

4. A Bayesian Approach to Capturing the Dilution Effect in Group Testing Data. The Southern Regional Council on Statistics, 58th Summer Research Conference, Waco TX (June 2023). *Self S.*, McMahan C., and Mokalled S.

5. A Bayesian Spatio-temporal Regression Model for Group Testing data. South Carolina Chapter of the American Statistical Association Palmetto Symposium, Columbia SC (April 2023). <u>*Zhao, X.*</u>[†], Nolan M., and **Self, S.**. Winner of Student Presentation Award.

6. A Hypothesis Test for the Detection of Spatial Clustering in Areal Data. Eastern North American Region (ENAR) of the International Biometric Society 2023 Spring Meeting, Nashville TN (March 2023). ***Self S.***, Overby A., Zgodic A., White D., McLain A., and Dyckman C.

7. A Group Testing Regression Model for Areal Data. Eastern North American Region (ENAR) of the International Biometric Society 2023 Spring Meeting, Nashville TN (March 2023). *Huang R.*[†], Herrin B., McLain A., Cai B., and **Self, S**.

8. Capturing the Pool Dilution Effect in Group Testing Regression: A Bayesian Approach, Eastern North American Region International Biometric Society Spring Meeting, Houston TX and virtual (March, 2022). ***Self S.***, McMahan C., and Mokalled S.

9. Predicting Local Demand for COVID-19 Inpatient Care with a Bayesian Susceptible-Infectious-Hospitalized-Ventilated-Recovered Model, Joint Statistical Meetings 2021, Virtual Meeting due to COVID-19 pandemic (August, 2021). ***Self S.***, Huang R., Amin S., Ewing A., Rudisill C., and McLain A.

10. A Bayesian Susceptible-Infectious-Hospitalized-Ventilated-Recovered Model to Predict Demand for COVID-19 Inpatient Care, Eastern North American Region, International Biometric Society Spring Meeting, Virtual Meeting due to COVID-19 pandemic (March 2021). ***Self S.***, Huang R.[†], Amin S., Ewing A., Rudisill C., and McLain A.

11. Identifying meteorological drivers of $PM_{2.5}$ levels via a Bayesian spatial quantile regression, Joint Statistical Meetings 2020, Virtual due to COVID-19 pandemic, (August 2020). ***Self S.***, McMahan C., and Russell, B.

12. Assessing meteorological drivers of air pollution in the Eastern United States via a Bayesian quantile regression model with spatially varying coefficients, Eastern North American Region (ENAR) International Biometric Society 2020 Spring Meeting, Virtual Meeting due to COVID-19 Pandemic (March 2020). ***Self S.***, McMahan C., Russell B., and Brown D.

13. Identifying regions with increasing Lyme disease risk using a Bayesian spatio-temporal model. Clemson University College of Science Donor Celebration, Clemson SC (April 2018). **Watson S.**, Liu Y., Lund R., Gettings J., Nordone S., McMahan C., and Yabsley M.

14. A Bayesian spatio-temporal model for identifying regions experiencing increasing disease risk. South Carolina Chapter of the American Statistical Association Palmetto Symposium, Columbia SC (March, 2018). **Watson S.**, Liu Y., Lund R., Gettings J., Nordone S., McMahan C., and Yabsley M.

15. Using Bayesian statistics and MCMC methods to model disease prevalence. Graduate Student Seminar, Clemson SC, (November 2017). **Watson S.**

16. A Bayesian spatio-temporal model for forecasting the prevalence of antibodies to *Borrelia burgdorferi*, causative agent of Lyme disease, in domestic dogs within the contiguous United States. South Carolina Chapter of the American Statistical Association Palmetto Symposium, Columbia SC (March 2017). **Watson S.**, Liu Y., Lund R., Gettings J., Nordone S., McMahan C., and Yabsley M.

17. Fighting fires with fighters: a version of the firefighter problem in which the fighter walks a continuous path on a square graph. MAA Southeastern Section Annual Meeting. Cookeville TN (March 2014). **Watson S.**, Lewis W., Isaac R., and Lewis T.

18. The Narayana numbers modulo 2: a discrete fractal. MAA Southeastern Section Annual Meeting. Rock Hill SC (March 2013). **Watson S.**, Isacc R., Farnsworth J., and Lewis T.

Methods Presentations: Poster

19. A Bayesian Spatial Scan Statistic for Normal Data. Eastern North American Region (ENAR) of the International Biometric Society 2023 Spring Meeting, Nashville TN (March 2023). *Velamakanni L.*[†], Wang Y., McLain A., and **Self, S.**.

20. Estimating the Power to Detect Spatially Varying Coefficient Effects with Conditional Autoregressive (CAR) Models: A Simulation Study Motivated by Social Determinants of Health Screening Data. Eastern North American Region (ENAR) of the International Biometric Society 2023 Spring Meeting, Nashville TN (March 2023). *DeMass R.*[†], Rudisill C., Zhang J., and **Self, S.**.

21. A Gradient Boosting Algorithm for a Large Scale Bayesian Spatio-Temporal Binomial Model for Disease Forecasting. University of South Carolina Big Data Health Science Center Conference, Columbia SC (February 2023). *Huang R.*[†], Herrin B., McLain A., Cai B., and **Self, S**.

22. A Bayesian Spatial Scan Statistic for Normal Data. University of South Carolina Big Data Health Science Center Conference, Columbia SC (February 2023). *Velamakanni L.*[†], Wang Y., McLain A., and **Self, S**.

23. A Bayesian multidimensional trend filter. Georgia Statistics Day, Athens GA (October 2018). ***Watson S.***, McMahan C., Russell B., and Brown D.

24. A Bayesian multidimensional trend filter. South Carolina Chapter of the American Statistical Association: South Carolina Statistics Consortium, Clemson SC (October 2018). ***Watson S.***, McMahan C., Russell B., and Brown,D.

25. A Bayesian GLMM for modeling spatially varying trends in disease prevalence with an application to Lyme disease. ENAR 2018 Spring Meeting, Atlanta GA (March 2018). ***Watson S.***, Liu Y., Lund R., Gettings J., Nordone S., McMahan C., and Yabsley M.

26. A Bayesian binomial GLMM for modeling spatially varying trends in large datasets with a computationally efficient model fitting procedure. Clemson-UGA Joint Seminar, Athens GA (March 2018). ***Watson S.***, Liu Y., Lund R., Gettings J., Nordone S., McMahan C., and Yabsley M.

Applied/Collaborative Presentations: Oral

27. Understanding CE Instruments in Rapidly Growing Exurban Areas Over Time. Association of Collegiate Schools of Planning Conference. Seattle WA (November 2024). Dyckman C., Overby A., White D., and **Self S.**

28. Forest Management Allowances and Restrictions on Conservation Easements. Society of American Foresters (SAF) National Convention. Loveland CO (September 2024). Overby A., Dyckman C., **Self S.,** and White D.

29. Unpacking the Evolution and Manifestation of Conservation Easements in a Sample of Exurban U.S. Counties. Association of Collegiate Schools of Planning 63rd Annual Conference, Chicago IL. (October 2023). *Dyckman C.*, Overby A., **Self S.,** White D., Lauria M., and Baldwin R.

30. The effects of patterns of polysubstance use on frequent emergency department utilization and one-year mortality. American College of Emergency Physicians 2023 Scientific Assembly, Philadelphia, PA. (October 2023). *Gormley M.*, Nishat N., **Self S.**, Moschella P., Litwin A.

31. The effects of patterns of polysubstance use on frequent emergency department utilization and one-year mortality. Prisma Health Research Showcase (October 2023). *Gormley M.*, Nishat N., **Self S.**, Moschella P., Litwin A.

32. Exurban Conservation Easements in the Context of a Climate Change Adaptation Diagnostic Framework. The International Academic Association on Planning, Law and Property Rights 17th Annual Conference, Ann Arbor MI (May 2023). *Dyckman C.*, Overby A., **Self S.**, and White D.

33. Association between Area Deprivation Index and COVID-19 Vaccination Status at Delivery: A Retrospective Cohort Study. C.M. Easley 29th Symposium and Resident Research Day, Greenville SC (May 2023). *Hardy H.*, Petyak E., Langford J., Stanley M., Rucker C., Brown B., Gorham L., Pratt K., Carlson L., **Self S.**, White A., and Pasko D. Winner of the H. Lee Higdon III: Outstanding Resident Research Presentation and the William R. Boone: Outstanding Resident Research Project/Manuscript.

34. Identifying Associations between Hotspots of Social Determinants of Health Needs, Community-Based Organizations and Healthcare Resource Use. University of South Carolina Big Data Health Science Center Conference, Columbia SC (February 2023). *DeMass R.*[†], Rudisill C., Zhang J., and **Self, S.**

35. The Utility of a Bayesian Predictive Model to Forecast Neuroinvasive West Nile Virus Cases in the United States, 2022. University of South Carolina Big Data Health Science Center Conference, Columbia SC (February 2023). *McCarter, M.*[†], **Self S.**, Lee C., Li H., Nolan M.

36. Emergency Medical Technicians Can Administer Nitrous Oxide for Effective Analgesia in an Urban Tiered-Response EMS System. American College of Emergency Physicians 2022 Scientific Assembly (October 2022). Costilla E., Teasley B., Zhao X.[†], Gormley M., Schwerin D., Troise M., Lutz M., Cobb M., **Self S**.

37. The Utility of a Bayesian Predictive Models to Forecast Neuroinvasive West Nile Virus Cases in the United States, 2022, Centers for Disease Control Southeastern Center of Excellence in Vector-Borne Disease 2022 Meeting (September 2022). *McCarter M.*[†], **Self S.**, Li H., Lee C., and Nolan M.

38. Exurban Conservation Easements' Import with Climate Change. Association of Collegiate Schools of Planning 62nd Annual Conference (July 2022). *Dyckman C*, Overby A, White D, **Self S**, Lauria M, Baldwin R.

39. Effectiveness of Cholangioscopy Guided Biopsy versus ERCP Guided Brushings in Diagnosing Malignant Biliary Strictures. University of South Carolina School of Medicine Greenville Summer Research Symposium (July 2022). Scetaris G., Singletary T., Grasso L., **Self S.**, Schammel D.P., Schammel C., Jones W., Devane A.M. *Finalist for Patient Impact Award.*

40. Cancer Prevention Activities in RHCs: Impacts of COVID-19, Annual Rural Health Conference (May 2022). *Zhand, W.,* Silverman A., **Self S.**, Hung P., Natafgi N., Adams S., Merrell M., Owens O., Crouch E., Eberth J.

41. Evaluating Postpartum Bleeding in Patients with Immediate Postpartum Long-Acting Reversible Contraceptives (LARCs). CM Easley 29th Annual Symposium and Resident Research Day, Greenville SC and virtual (April, 2022). *Cacciatore V.,* Snell A., Weisberg M., Thomas J., **Self S.**, Hufford J., and Carlson L.

42. Patient and Provider Satisfaction with Integration of Telehealth into Prenatal Care. CM Easley 29th Annual Symposium and Resident Research Day, Greenville SC and virtual (April, 2022). *Martin K.,* Lambert S., **Self S.**, Hufford J., and Carlson L.

43. A Comparison of H. Pylori Detection Methods, American Society for Microbiology South Carolina Annual Meeting (October 2021). Hill K., Ohning A., Mallory J., **Self S.**, Schammel C., Meredith J., Reddic J., Knight J. *Winner of best medical student presentation award.*

44. Landowners' Incentives to Place Conservation Easements in Exurban Areas, Association of Collegiate Schools of Planning 61st Annual Conference, Miami, FL (October 2021). *Dyckman C.,* Overby A., White D., Lauria M., Baldwin R., McMahan C., **Self S.,** and Fouch N.

45. Using a Novel Digital Platform to Examine Resource Utilization of Social Determinants of Health Screening within a Large Healthcare System, American Public Health Association's (APHA) 2021 Annual Meeting and Expo, Denver CO (October 2021). *Gupta D.[†],* **Self S.,** Thomas D., Eicken M., Supra J., and Rudisill C.

46. Non-alcoholic Steatohepatitis (NASH) Elastography versus Liver Biopsy, USCSOMG Soaring Summer Research Symposium, Greenville SC (July, 2021). Wilson C., Hall R., **Self S.,** Schammel D.P., Schammel C.M., and Devane A.M.

47. Evaluating a technology and EMR-based strategy to intervene on social determinants of health in a large health system, Big Data Health Science Center Conference, Virtual Meeting due to COVID-19 pandemic (February 2021). Rudisill C., **Self S.,** Thomas D., Gupta D.[†], and Eicken M.

48. Conservation easement characteristics in exurban areas, Association of Collegiate Schools of Planning 60th Annual Conference, Virtual due to COVID-19 pandemic (November 2020). *Dyckman C.,* White D., Baldwin R., Lauria M., McMahan C., Overby A., **Self S.,** and Fouch N.

49. A Comparative Assessment of Systematic & Coordinated Conservation Planning in Exurban Ecoregions, 2020 International Symposium for Society & Resource Management, Virtual due to COVID-19 pandemic (June 2020). *Dyckman C.,* Overby A., Lauria M., White D., Baldwin R., Fouch N., **Self S.,** and McMahan C.

50. Induction of labor versus planned Cesarean section for women with body mass index of $\geq$ 45, C.M. Easley 28th Symposium and Resident Research Day, Greenville SC (May 2020). *Deighan, T.,* **Self S.,** Huang R.[†], and Crockett A.

51. An evaluation of breast cancer in Hispanic women at a single tertiary medical center. Health Sciences Center Research Showcase, Virtual due to COVID-19 pandemic (April 2020). Perregeaux S., **Self S.,** Collins J., Renfro S., VanHale S., Ansari A., Rippen M., Schammel C., and Schammel D.

52. Impact of the "39-week rule" on adverse maternal outcomes: A statewide analysis, Society for Maternal-Fetal Medicine, 40th Annual Pregnancy Meeting, Grapevine TX (February 2020). *Cochrane A. C.,* Batson R., Aragon M., Bedenbaugh M., **Self S.,** Isham K., and Eichelberger K.

53. The spatial geography of exurban conservation easements in twelve counties across the U.S. International Symposium on Society and Resource Management, Oshkosh WI (June 2019). *Dyckman C.,* Lauria M., White D., Baldwin R., Fouch N., Overby A. T., Ogletree S., and **Self S.**

54. Impact of hospital type and provider profession on beliefs about elective induction in nulliparous women. 2019 C. M. Easley Symposium and Resident Research Day, Greenville SC (May 2019). *Aragon M.,* Cochrane A., Batson R., **Self S.,** Thorp J., Isham K., and Eichelberger K.

55. Impact of the "39-week rule" on adverse maternal outcomes: A statewide analysis. 2019 C. M. Easley Symposium and Resident Research Day, Greenville SC (May 2019). *Cochrane, A.,* Batson R., Aragon M., Bedenbaugh M., **Self S.,** Isham K, and Eichelberger K.

56. Impact of the "39-week Rule" on adverse neonatal outcomes: A statewide analysis. 2019 C. M. Easley Symposium and Resident Research Day, Greenville SC (May 2019). *Batson R.,* Cochrane A., Aragon M., **Self S.,** Eichelberger K. and Isham K.

Applied/Collaborative Presentations: Poster

57. Retrospective Analysis of Radiation Dose Savings Among Patients Undergoing UAE, PAE, and TIPS Procedures. Prisma Health Education and Research Institute Showcase 2024. Greenville SC (October 2024). Farmer A., **Self S.,** Schammel C., Devane M.

58. Decreasing 72-hour Readmissions in Sepsis and Pyelonephritis Patients. Prisma Health Education and Research Institute Showcase 2024. Greenville SC (October 2024). Burns R., Meng L., Gormley M., **Self S.,** Hudepohl N.

59. Castleman's Disease: a single institution's experience and review of the literature. Prisma Health Education and Research Institute Showcase 2024. Greenville SC (October 2024). Gossett E., Merchant K., **Self S.,** Devane A., Schammel D., Schammel C., Knight J.

60. Impact of a resource navigator program on clinical outcomes, healthcare costs, and quality of life for patients with food insecurity and diabetes and/or hypertension: a matched cohort study. Academy-Health 2024 Annual Research Meeting, Baltimore MD (June 2024). Gupta D.[†], Thomas D., **Self S.,** Frongillo E., Litwin A., Ewing A., Ramos-Gonzalez L., Rudisill C.

61. Cost-effectiveness of a Comprehensive Team-Based Intervention for Pregnant Women with Diabetes: A Markov Cohort Study. The International Society for Pharmacoeconomics and Outcomes Research 2024 Conference. Atlanta GA (May 2024). *Gupta D*[†]*.,* Frongillo E., **Self S.,** Litwin A., Schellinger M., Fiocchi D., Stancil M., Cart C., and Rudisill C.

62. Amlodipine versus nifedipine ER for the management of postpartum hypertension: a noninferiority randomized controlled trial. American Society of Maternal Fetal Medicine 44th Annual Meeting, National Harbor MD (February 2024). Pratt K., Lordo A., **Self S.,** Carlson L. *Winner of the best poster award*.

63. Resource navigator support for food-insecure patients with diabetes and/or hypertension: An electronic medical record-based study analyzing within-group changes in clinical outcomes using a matched sample design. American Public Health Association Annual Meeting, Atlanta GA (November 2023). *Gupta D.*[†], Thomas D., **Self S.,** Litwin A., Ewing A., Ramos-Gonzalez L, and Rudisill C.

64. Screening for social determinants of health in primary care practices: Lessons from a pilot implementation in a large health system. Academy Health 2023 Annual Research Meeting, Seattle WA (June 2023). Gupta D.[†], Eicken M., Thomas D., Kao E., Jeanty M., Macauda M., Kennedy A. B., **Self S.,** Hartley J., and Rudisill C.

65. The Utility of a Bayesian Predictive Model to Forecast Neuroinvasive West Nile Virus in the United States, 2022. Eastern North American Region (ENAR) of the International Biometric Society 2023 Spring Meeting, Nashville TN (March 2023). *McCarter, M.*[†], **Self S.,** Lee C., Li H., Nolan M.

66. Emergency Medical Technicians Can Administer Nitrous Oxide for Effective Analgesia in an Urban Tiered-Response EMS System. Prisma Health Research Showcase (October 2022). Costilla E., Teasley B., Gormley M., Lutz M., Troise M., Zhao X.[†], Blackwell T., **Self S.,** Cobb M. and Schwerin D.

67. Deep Vein Thrombosis in Patients Diagnosed with COVID-19, Prisma Health Research Showcase (October 2022). Rahman T., Jasper Z., Raghavan R., Schammel C., **Self S.,** Gray B., and Devane M.

68. Evaluating Postpartum Bleeding in Patients with Immediate Postpartum Long-Acting Reversible Contraceptives, Prisma Health Research Showcase (October 2022). Weisberg M., Cacciatore V., Snell A., Thomas J., **Self S.,** Hufford J. and Carlson L. *Runner Up for Best Overall Research Award.*

69. Radiation Dosage to Patients During Prostatic Artery Embolization. University of South Carolina School of Medicine Greenville Summer Research Symposium (July 2022). Ngov D., **Self S.**, Schammel C.M.G., Devane A.M.

70. Pleomorphic Lobular Carcinoma in situ. University of South Carolina School of Medicine Greenville Summer Research Symposium (July 2022). Billing D., **Self S.**, Schammel C.M.G., McKinley B., Scopteuolo A., Schammel D. *Finalist for Outstanding Poster Award.*

71. Granular Cell Tumors of the GI Tract. University of South Carolina School of Medicine Greenville Summer Research Symposium (July 2022). Koberlein A., Warren A., **Self S.**, Schammel C.M.G., Yurko Y., .Schammel D.P.

72. Granular Cell Tumors of the GI Tract, University of South Carolina School of Medicine Greenville Summer Research Symposium (July 2022). Warren A., **Self S.**, Schammel C.M.G., Yurko Y., Schammel D.P.

73. Pleomorphic Lobular Carcinoma in situ, University of South Carolina School of Medicine Greenville Summer Research Symposium (July 2022). Billing D., **Self S.**, Schammel C.M.G., McKinley B., Scopteuolo A., and Schammel D.

74. Splenic Artery Embolism: A Non-Invasive Intervention for Blunt Splenic Injury, 2022 American Roentgen Ray Society Spring Meeting (May 2022). Prescott M., Eagar R., Corso O., **Self S.,** Cull J., Schammel C., Devane A.

75. Connections between Social Determinants of Health Screening Via an Electronic Health Records-Based Platform and Healthcare Utilization: An Observational Study Based on a Pilot Implementation in a Large Health System in South Carolina, Academy Health Annual Meeting (June 2022). Gupta D.[†], **Self S.**, Thomas D., Eicken M., Supra J., and Rudisill C.

76. Implementing a Social Determinants of Health Screening and Electronic Health Records-Based Platform to Assess Healthcare Utilization and Community Health Resource Use: An Observational Study Based in a Large Health System in South Carolina, University of South Carolina Big Data Health Science Center Conference, Columbia SC (February 2022). Gupta D.[†], **Self S.**, Thomas D., Eicken M., Supra J., and Rudisill C.

77. Error Occurrence in Death Certification: A Single Health System Based Review. Health Sciences Center Prisma Health Research Symposium, Greenville SC (October 2021). Marler A., Logan C., **Self S.**, Schammel C.M., Ward M., Fulcher J., and Dukes G.

78. A Comparison of H. Pylori Detection Methods. Health Sciences Center Prisma Health Research Symposium, Greenville SC (October 2021). Hill K.L., Ohning A.V., Mallory J.P., **Self S.**, Schammel C.M., Meredith J., Reddic J., and Knight J.B.

79. Evaluation of the 2016 Grading System of Post-operative Pancreatic Fistulas: A Single Institution Review of Definition Relevancy. Health Sciences Center Prisma Health Research Symposium, Greenville SC (October 2021). Tedeschi T., Balcázar A., **Self S.**, Schammel C.M., Devane A.M., Scholer A., and Trocha S.

80. Splenic Artery Embolism: A Non-Invasive Intervention for Blunt Splenic Injury, Health Sciences Center Prisma Health Research Symposium, Greenville SC (October 2021). Prescott M., Eagar R., Corso O., **Self S.,** Cull J., Schammel C., Devane A.

81. Error Occurrence in Death Certification: Improving Accuracy with Educational Intervention, 2021 American Medical Association Research Challenge, virtual due to COVID-19 pandemic (October 2021). Logan C., Marler A., **Self S.**, Schammel C.M., Ward M., Fulcher J., and Dukes G.

82. Non-alcoholic Steatohepatitis (NASH) Elastography versus Liver Biopsy, 2021 American Medical Association Research Challenge, virtual due to COVID-19 pandemic (October 2021). Wilson C., Hall R., **Self S.**, Schammel D.P., Schammel C.M., and Devane A.M.

83. Error Occurrence in Death Certification: Improving Accuracy with Educational Intervention, South Carolina Chapter of the American College of Physicians Meeting, Charleston SC (October 2021). Logan C., Marler A., **Self S.**, Schammel C.M., Ward M., Fulcher J., and Dukes G. *Winner of the best student presentation award and the best student research project award.*

84. Robotic vs. Laparoscopic Excision of Gastrointestinal Stromal Tumors: A Single SurgeonâĂŹs Experience at a Regional Institution, South Carolina Chapter of the American College of Physicians Meeting, Charleston SC (October 2021).Warren W., Duke K., Stephenson S., **Self S.**, Schammel C., Trocha S.

85. Error Occurrence in Death Certification: Improving Accuracy with Educational Intervention, USC-SOMG Soaring Summer Research Symposium, Greenville SC (July, 2021). Logan C., Marler A., **Self S.**, Schammel C.M., Ward M., Fulcher J., and Dukes G.

86. Error Occurrence in Death Certification: A Single Health System Based Review. USCSOMG Soaring Summer Research Symposium, Greenville SC (July, 2021). Marler A., Logan C., **Self S.**, Schammel C.M., Ward M., Fulcher J., and Dukes G.

87. Evaluation of the 2016 Grading System of Post-operative Pancreatic Fistulas: Literature vs Clinical Disparity. USCSOMG Soaring Summer Research Symposium, Greenville SC (July, 2021). Balcázar A., Tedeschi T., **Self S.**, Schammel C.M., Devane A.M., Scholer A., and Trocha S.

88. Post-operative Pancreatic Fistulas: A single institution review of definition relevancy. USCSOMG Soaring Summer Research Symposium, Greenville SC (July, 2021). Tedeschi T., Balcázar A., **Self S.**, Schammel C.M., Devane A.M., Scholer A., and Trocha S.

89. Splenic Artery Embolism. Prescott M., Eagar R., Corso O., **Self S.**, Cull J., Schammel C.M., and Devane A.M. USCSOMG Soaring Summer Research Symposium, Greenville SC (July, 2021).

90. Spyglass vs. Brush Biopsy. Singletary T., Grasso L., **Self S.**, Schammel D.P., Schammel C.M., Jones W., and Devane A.M. USCSOMG Soaring Summer Research Symposium, Greenville SC (July, 2021).

91. A Comparison of H. Pylori Detection Methods. USCSOMG Soaring Summer Research Symposium, Greenville SC (July, 2021). Hill K.L., Ohning A.V., Mallory J.P., **Self S.**, Schammel C.M., Meredith J., Reddic J., and Knight J.B.

92. Resolution of Symptoms Following Surgical Resection of Meningioma. USCSOMG Soaring Summer Research Symposium, Greenville SC (July, 2021). Rodriguez G., Teran S., Schammel N., **Self S.**, Schammel C.M., and Lynn M.

93. Influential Factors for Meningioma Recurrence. USCSOMG Soaring Summer Research Symposium, Greenville SC (July, 2021). Teran S., Rodriguez G., Schammel N., **Self S.**, Schammel C.M., and Lynn M.

94. Breast Cancer Diagnosed on GI Biopsy. Discover UofSC, virtual due to COVID-19 pandemic (April 2021). Suchy C., **Self S.,** Schammel C., and Schammel D.P.

95. Factors Influencing Discharge Location following Ischemic Stroke. Discover UofSC, virtual due to COVID-19 pandemic (April 2021). Durbin L., Edenfield J., **Self S.,** Schammel C.M.G, and Kopera K.

96. Orofacial Clefts: An Evaluation of Diagnosis, Treatment and Compliance at at Regional Medical Center, Discover UofSC, Virtual meeting due to COVID-19 pandemic (April, 2021). Lucas C., Perregeaux S., Angermayer M., Conrad H., Nye A., **Self S.**, Schammel C., DeBrux C., and Amati B.

97. Associations Between Food Insecurity and Pregnancy Outcomes in a Low-Income Population, Discover UofSC, Virtual meeting due to COVID-19 pandemic (April, 2021). *Huang R.*[†] (presenter), **Self S.**, Britt J., and Crockett A. *Awarded best abstract in the Maternal Child Health Catalyst Program Abstract Competition.*

98. Atypical Lobular Hyperplasia and Lobular Carcinoma In-situ: To Upgrade or Not to Upgrade? Discover UofSC, Virtual meeting due to COVID-19 pandemic (April 2021). Krachman H, Bland S., Russell N., **Self S**, Schammel C., Cornett W., Rippon M., and Schammel D.

99. Atypical Ductal Hyperplasia. Discover UofSC, Virtual meeting due to COVID-19 pandemic (April 2021). Bland S., Krachman H., **Self S.**, Schammel C.M.G., and Schammel D.P.

100. Atypical ductal hyperplasia: To Upgrade or Not to Upgrade? South Carolina Upstate Research Symposium, Virtual Meeting due to COVID-19 pandemic (April 2021). Krachman H, Bland S., Russell N., **Self S**, Schammel C., Cornett W., Rippon M., Schammel D.

101. Atypical Lobular Hyperplasia and Lobular Carcinoma In-situ: To Upgrade or Not to Upgrade? South Carolina Upstate Research Symposium, Virtual Meeting due to COVID-19 pandemic (April 2021). Krachman H, Bland S., Russell N., **Self S**, Schammel C., Cornett W., Rippon M., Schammel D.

102. Accurate Diagnosis of B Cell ALL Mutations Using Karyotyping and Fluorescence In-Situ Hybridization (FISH) in Adolescent/Young Adult and Adult Populations. South Carolina Upstate Research Symposium, Virtual Meeting due to COVID-19 pandemic (April 2021). Zhou E., **Self S**, Schammel C., Knight J.

103. Induction of labor versus planned Cesarean section for women with body mass index $\geq$ 45, Society of Maternal-Fetal Medicine, 41st Annual Pregnancy Meeting, Virtual Meeting due to COVID-19 pandemic (February 2021). *Deighan T.,* **Self S.**, Huang R., and Crockett A.

104. Does surgical approach effect outcomes in treatment of rectal cancer? American Society of Colorectal Surgeons Annual Scientific Meeting, Virtual due to COVID-19 pandemic (June, 2020). Yurko Y., Schammel D., Schammel C., Bynarowica T., McGill W., and **Self S.**

105. Atypical lobular hyperplasia and lobular carcinoma insitu: To upgrade or not to upgrade? Health Sciences Center Research Showcase, Virtual due to COVID-19 pandemic (April 2020). Krachman H., Russel N., Bland S., **Self S.**, Schammel C., Cornett W., Rippon M., and Schammel D.

106. Prostatic embolization as an alternative treatment for benign prostatic hyperplasia. Health Sciences Center Research Showcase, Virtual due to COVID-19 pandemic (April 2020). Pike J., Sekel T., Abel W., **Self S.**, Schammel C., Devane M.

107. Outcomes of surgical and non-surgical management of gastric carcinomas at Greenville Memorial Hospital. Health Sciences Center Research Showcase, Greenville SC Virtual due to COVID-19 pandemic (April 2020). Seckel T., Pike J., Abel W., Hernandez V., **Self S.,** Schammel C., Schammel D., Trocha S.

108. Impact of the "39 week Rule" on adverse neonatal outcomes: A statewide analysis, Society for Maternal-Fetal Medicine, 40th Annual Pregnancy Meeting, Grapevine TX (February 2020). *Batson R.*, Cochrane A., Aragon M., **Self S.**, Eichelberger K., and Isham K.

109. Persisting dilemma: is GCT benign disease or potentially malignant. Ashmore Conference, Greenville SC (May 2019). Stafford S., Frederick A., Lorenz W, **Self S.**, Schammel D., Schammel C., and Yurko Y.

110. Delayed gastric emptying post esophagectomy: A single institution experience. Ashmore Conference, Greenville SC (May 2019). Frederick A. (presenter), Lorenz W., **Self S.**, Schammel C., Bolton W. Stephenson J., and Ben-Or S.

111. Obstructive sleep apnea and white matter hyperintensities: Correlation or causation? American Society of Neuroradiology Spring Meeting, Boston MA (May 2019). Vandewater T., Schammel N., Wilson C., **Self S.**, Schammel C., Cowley R., Gault D., and Madeline L.

112. Obstructive sleep apnea and white matter hyperintensities: Correlation or causation? Greenville Health System Symposium, Greenville SC (April 2019). Vandewater T., Schammel N., Wilson C., **Self S.**, Schammel C., Cowley R., Gault D., and Madeline L.

113. Delayed gastric emptying post esophagectomy: A single institution experience. Greenville Health System Symposium, Greenville SC (April 2019). Frederick A., Lorenz W., **Self S.**, Schammel C., Bolton W., Stephenson J., and Ben-Or, S.

114. Obstructive sleep apnea and white matter hyperintensities: Correlation or causation? Wallace R. Roy Functional Radiology Symposium, Greenville SC (March 2019). Vandewater T., Schammel N., Wilson C., **Self S.,** Schammel C., Cowley R., Gault D., and Madeline L.

115. Ticks and tick-borne diseases: Tracking an invasive tick and modeling efforts for tick-borne pathogens. Shelter Medicine Symposum, Athens GA (February 2019). Yabsley M., Gettings J., McMahan C., Lund R., Liu Y., Nordone S., and **Self S.**

116. The rising seroprevalence of *Borrelia burgdorferi* in domestic dogs. Georgia Veterinary Medical Association One Health Symposium, Athens GA (January 2019). **Watson S.**, Nordone, S., Yabsley M., Lund R., McMahan C. S., and Gettings J.

117. Companion Animal Parasite Council: One Health in Practice. Georgia Veterinary Medical Association One Health Symposium, Athens GA (January 2019). Yabsley, M., **Watson, S.**, Lund R., McMahan C., and Gettings, J.

118. Delayed gastric emptying post esophagectomy: A single institution experience, Eastern Cardiothoracic Surgical Society Annual Meeting, Clearwater Beach FL (October 2018). Fredrick A., Lorenz W., **Self S.,** Ben-Or S., and Schammel C.

Funded Research

Pending

Mitigating Injurious Falls in Older Adults Through Non-Injurious Fall and Gait Analysis From Floor Vibrations (STTR Phase II B, resubmission of a competing renewal)
Total Costs: $821,102
PI: Stacy Fritz
Period: 2024-26
Role: Co-I (10%)

Using behavioral economics to increase food insecurity screening of patients with diabetes in clinical settings
Source: National Insitutes of Health
Total Costs: $ 2,293,122
PI: Caroline Rudisill
Period: 2025-2029
Role: Co-I (8%)

Centers for Research in Emerging Infectious Diseases (CREID)
Source: Centers for Disease Control and Prevention
Total Costs: $7,887,435
PI: Melissa Nolan
Period: 2024-2029
Role: Co-I (5%)

Ongoing

1R01AI179840-01: Developing New Statistical Models for Vector-Borne Disease Surveillance to Improve Accuracy while Reducing Cost (R01)
Source: National Institute of Allergies and Infectious Diseases
Total Costs: $3,719,295
PI: **Stella Self** (20%)
Period: 2023-2028

CAPC 2021 University of South Carolina Parasite Forecasting
Source: The Companion Animal Parasite Council (CAPC)
Total Costs: $ 117,734
PI: **Stella Self** (3% Y1, in-kind Y2-Y3)
Period: 2021-2023

Center for Clinical and Translational Research at USC (CLINTRUSC)
Source: National Center for Advancing Translational Sciences
Total Costs: $10,970,908
PI: Francis Spinale
Period: 2024-2029
Role: Co-director of the Research Design, Compliance and Data Management Core (10% effort)

R01AI165560-01: Improving mosquito control methodologies through development of technology-driven traps and artificial intelligence guided detection of mosquito breeding habitats (R01)
Source: National Institute of Allergies and Infectious Diseases
Total Costs: $3,280,171
PI: Melissa Nolan
Period: 2021-2026
Role: Co-I (5%)

P20GM130420: Research Center for Child Well-Being (COBRE Phase I)
Source: National Institute of General Medical Sciences
Total Costs: $11,162,883
PI: Ron Prinz
Period: 2020-2024
Role: Core Scientist, Statistical and Data Management Core (20%)

2U1CRH30539-05-00: Rural Health Research Center Program
Source: U.S. Health Resources and Services Administration
Total Costs for Current Year: $284,553
PI: Elizabeth Crouch
Period: 2020-2024
Role: Affiliated Investigator (10%)

OT21-2103: South Carolina's Initiative to Address COVID-19 Health Disparities Among Populations at High-Risk and Underserved, Including Racial and Ethnic Minority Populations and Rural Communities

Source: Centers for Disease Control and Prevention
Total Costs: $5,480,832
PI: Melissa Nolan
Period: 2021-2023
Role: Co-I (20%)

U38FT000011 Disease Modeling and Analytics to inform Outbreak Preparedness, Response, Intervention, Mitigation, and Elimination in South Carolina (DMA-PRIME)
Source: Centers for Disease Control and Prevention
Total Direct Costs: $2,497,304
PI: Lior Rennert
Period: 2023-2028
Role: Co-I (10%)

Improving Health Outcomes through Community Collaborations to Address Food Access and Food Insecurity in a Large Healthcare System
Source: The Duke Endowment
Total Direct Costs: $498,000
PI: Darin Thomas
Period: 2020-2023
Role: Co-I (11%)

Utilizing Prisma Health's PLACES (Providing Linkages and Connections to External Social Support Services) Hub to Improve Health in Communities
Source: The Duke Endowment
Total Direct Costs: $520,000
PI: Caroline Rudisill
Period: 2023-2025
Role: Co-I (10%)

Completed

Mitigating Injurious Falls in Older Adults Through Non-Injurious Fall and Gait Analysis From Floor Vibrations: Phase 2 (STTR)
Source: National Institute on Aging
Total Costs:
PI: Stacy Fritz
Period: 2021 - 2023
Role: Co-I (10%)

Using Data to Drive Implementation- Stakeholder Perspectives on Screening and Addressing Social Determinants of Health at Prisma Health
Source: Health Sciences Center at Prisma Health
Total Costs: $19,872
PI: Caroline Rudisill
Period 2022-2023
Role: Co-I (in-kind)

Recipient of Big Data Health Science Fellow
Source: Big Data Health Sciences Center at University of South Carolina's NIAID R25AI164581-01 (R25) Big Data Health Science Fellow Program
Total Costs: $1,755,000
PIs: Xiaoming Li and Jiajia Zhang

Period: 2021-2022
Role: Trainee (25%)

A Data-Driven Model to Predict Demand for COVID-19 Care in the Prisma Health System
Source: Health Sciences Center, Prisma Health
Total Direct Costs: $14,303
PI: **Stella Self**
Period: 2020-2021
Role: PI (In-kind)

McLeod Health COVID-19 Data Analysis
Source: McLeod Health
Total Costs: $1,015
PI: **Stella Self** (in-kind)
Period: 2020

5U19DD001218: Modeling Small Area Estimates of Indicators of Children's Mental Health and Mental Disorders Using National Survey Data
Source: Centers for Disease Control and Prevention
Total Costs: $302,542
PIs: Jan Eberth and Alexander McLain
Period: 2020-2022
Role: Co-I (10% Y1, 2% Y2)

NU50CK000542: Epidemiology and laboratory capacity for prevention and control of emerging infectious diseases
Source: U.S. Department of Health and Human Services and South Carolina Department of Health and Environmental Control
Total Costs: $1,333,934
PI: Melissa Nolan
Period: 2020-2021
Role: Co-I (20% Effort)

Access and Utilization of Colonoscopy: A Spatial Perspective
Source: American Cancer Society Mentored Research Scholar Grant
Total Costs: $579,000
PI: Jan Eberth
Period: 2016-2020
Role: Co-I (5% Effort)

Bringing Together Research and Operational Priorities- Evaluation of Technology and EMR-Based Strategy to Screen for Social Determinants of Health (SDoH)-Related Needs at Prisma Health
Source: Health Sciences Center at Prisma Health
Total Costs: $19,872
PI: Caroline Rudisill
Period: 2021-2022
Role: Co-I (in-kind)

Evaluating a Technology and EMR-based Strategy to Intervene on Social Determinants of Health-Related Needs in a Large Health System
Source: University of South Carolina Big Data Health Science Center
Total Costs: $34,846
PI: Caroline Rudisill

Period: 2020-2021
Role: Co-I (In-kind)

Not Funded

Early Detection of Health Decline in Older Adults Through Life Space Patterns and Gait Analysis from Floor Vibrations (SBIR Phase I)
Source: National Institute on Aging
Total Costs: ~ $300,000
PI: Yohanna Mejia Cruz
Period: 2024-25
Role: Co-I (10%)

Mitigating Injurious Falls in Older Adults Through Non-Injurious Fall and Gait Analysis From Floor Vibrations (STTR Phase II B, competing renewal)
Total Costs: $821,102
PI: Stacy Fritz
Period: 2024-26
Role: Co-I (10%)

Modeling infectious disease abundance in centralized wastewater treatment plants to predict disease transmission trends in rural areas
PI: Sean Norman
Period: 2024-2026 Role: Co-I

Assessment of Dietary Quality on Cancer-related Cognitive Decline during Chemotherapy
Source: National Institutes of Health Total Direct Costs: $401,342
PI: Micheal Wirth
Period: 2024-2025
Role: Co-I

Using Social Norms-Based Nudges to Increase the Proportion of Patients with Diabetes who are Screened for Food Insecurity
Source: American Heart Association
Total Costs: $399,992
PI: Caroline Rudisill
Period: 2024-2025
Role: Co-I (10 % effort)

Regression Analyses for Pooled biomonItoring Data (RAPID) (R01)
Source: National Institute of Environmental Health Sciences
Total Direct Costs: $1,474,133
PI: Dewei Wang
Period: 2023-2016
Role: Co-I (20% effort)

Quantifying Risk of Exposure to Lone Star Ticks with Machine Learning Methods
Source: University of South Carolina Big Data Health Sciences Center
Total Direct Costs: $19,546
PI: **Stella Self** (in-kind)
Period: 2023-2024
This proposal was initially selected for funding; it was a pilot proposal to support an R01. The R01 was funded prior to the pilot start date and so the pilot proposal was not necessary

Longitudinal Pilot Study to Inform the Development of a Future Nursing Student Cohort to Study the Transition to the Early-Career Nurse (R21)
Source: National Institute on Nursing Research
Total Costs: $397,892
PI: Michael Wirth
Role: Co-I (10%)

Novel Surveillance Strategies for Vector-Borne Disease which Reduce Cost and Improve Accuracy (R01)
Source: National Institute of Allergies and Infectious Diseases
Total Costs: $,568,019
PI: **Stella Self** (18%)
Impact Score: 42

Novel Surveillance Strategies for Vector-Borne Disease which Reduce Cost and Improve Accuracy (R01 resubmission)
Source: National Institute of Allergies and Infectious Diseases
Total Costs: $3,667,461
PI: **Stella Self** (15%)
Impact Score: 35

Developing a Statistical Model for Passive COVID-19 Surveillance using the Amount of SARS-CoV-2 RNA in Wastewater and the Reported Number of Positive SARS-CoV-2 Viral Tests (R21)
Source: National Institute of Allergies and Infectious Diseases
Total Costs: $410,040
PI: **Stella Self** (20%)
Impact Score: 47

CAREER: Novel Statistical Methods for the Detection of Spatial Patterns Relative to a Non-Homogenous Null Distribution and Extensions to the Bayesian Spatial Scan Statistic
Source: National Science Foundation: Directorate for Mathematical and Physical Sciences
Total Costs: $680,056
PI: **Stella Self** (17%)

South Carolina Clinical and Translational Research Center (SC-CTRC) (Resubmission)
Source: NIH
Total Costs: $20,272,182
PI: Xiaoming Li
Role: Co-I (20%)

Lung Cancer Screening to Treatment Pathways for Rural Patients (R01)
Source: National Cancer Institute
Total Costs: $2,539,306
PI: Jan Eberth
Role: Co-I (10%)

Feasibility Study Focused on Recruitment, Retention, and Questionnaire and Saliva Collection among Nursing Students to Inform Development of a Future Nursing Student Cohort to Address Burnout (R21)
Source: National Institute on Nursing Research
Total Costs: $397,990
PI: Michael Wirth
Role: Co-I (7%)

Examining the Effect of HIV and Trauma on Cognitive Impairment and Alzheimer's Disease Risk (R21)
Source: National Institute of Mental Health
Total Costs: $423,723
PI: Monique Brown
Role: Co-I (10%)

Joining the Dots between Food Insecurity, Multimorbidity, Cognition, and Race among Older Adults (R21)
Source: NIH
Total Costs: $362,210
PI: Anwar Merchant
Role: Co-I (10%)

Mitigating Injurious Falls in Older Adults Through Non-Injurious Fall and Gait Analysis From Floor Vibrations: Phase 2 (STTR)
Source: National Institute on Aging
Total Costs: $516,487
PI: Stacy Fritz
Role: Co-I
Impact Score: 41

Associations of Fertility Status and Infertility Treatment with Outcomes of Pregnancy and Women's Health (supplement to South Carolina IDeA Networks of Biomedical Research Excellence)
Source: National Institute of General Medical Sciences
Total Costs: $157,580 PI: Xuewan Wang
Role: Co-I (5%)

Southeastern Public Health Pathogen Genomic Center of Excellence
Source: Centers for Disease Control and Prevention
Total Costs: $15,370,068
PI: Melissa Nolan
Role: Co-I (20%)

Assessing Trends in Lyme Disease Risk by Integrating Data from Multiple Sources into a Bayesian Spatio-Temporal Model
Source: University of South Carolina Big Data Health Sciences Center
Total Costs: $41,408
Role: PI (8%)

A Retrospective Analysis to Investigate the Association between Coinfection with *Chlamydia trachomatis* and *Neisseria gonorrhoeae* during Pregnancy and Adverse Neonatal Outcomes
Total costs: $20,000
Source:Health Sciences Center, Prisma Health
Role: PI (in-kind)

Online Mindfulness Intervention to Reduce Stress among Diabetes Patients
Source: Health Sciences Center, Prisma Health
Total Costs: $20,000
PI: Sara Wagner Robb and Jessica Odom
Role: Co-I (in-kind)

Teaching Experience

University of South Carolina

BIOS J711 Introduction to R Programming: Fall 2021 (n=13), Fall 2023 (n = 13)

BIOS 745 Seminar in Biostatistics: Fall 2021 (n=6)

BIOS 746 Introduction to Complex Survey Data Analysis: Spring 2022 (n=2)

BIOS J746 Introduction to Complex Survey Data Analysis: Spring 2023 (n=6)

BIOS J757 Intermediate Biostatistics: Spring 2020 (n=4), Spring 2021 (n=21), Spring 2023 (n=16), Spring 2024 (n = 22), Spring 2025 (n = 18)

BIOS 760 Biostatistical Methods for Clinical Trials: Fall 2020 (n=7), Fall 2022 (n=9), Fall 2024 (n = 3)

BIOS 845 Doctoral Seminar: Spring 2024 (n = 14)

BIOS 890 Consulting Practicum (Independent Study): Fall 2020 (n=1), Fall 2021 (n=1), Spring 2022 (n=1), Fall 2022 (n=1), Spring 2023 (n=1), Fall 2023 (n=2), Spring 2024 (n=1), Fall 2024 (n=1), Spring 2025 (n = 2)

BIOS 890 Independent Study: Spring 2022 (n=1), Fall 2023 (n=1)

Clemson University

Statistics Preliminary Exam Review Course: Summer 2017 (Instructor)

MATH 1020: Business Calculus I: Summer 2015 (Teaching Assistant)

MATH 1040: Precalculus and Introductory Differential Calculus: Fall 2015 (Instructor)

MATH 1051: Precalculus Laboratory: Fall 2014 (Teaching Assistant)

MATH 1060: Calculus of One Variable I: Spring 2015, Summer 2016 (Teaching Assistant)

MATH 1070: Differential and Integral Calculus: Spring 2015 (Teaching Assistant)

MATH 1991: Problem Solving in Mathematics Laboratory: Fall 2014 (Teaching Assistant)

Mentoring

Faculty

Brandon Hollingsworth, Bridge to Faculty mentor (2024-)

Devin Bowes, FIRST FIRRE peer faculty mentor (2023-)

Doctoral students: University of South Carolina

Committee Chair

Xingpei Zhao: PhD Biostatistics (2022-)

Maggie McCarter: PhD Epidemiology, co-chair with Melissa Nolan (2020-2023)
The Utility of Bayesian Predictive Models to Forecast Arboviruses in the United States of America and Territories

Rongjie Huang: PhD Biostatistics (2020-2023)
Bayesian spatial and spatio-temporal models for complex datasets

Committee Member

Dai Fang: PhD Biostatistics (2024-)

Qingyuan Hong: PhD Statistics (2024-)
Bayesian Logistic Regression with Pooled Biomonitoring Data

Nasim Nishat: PhD Biostatistics (2023-)

Zile Zhao: PhD Statistics (2023-)
Methods and Application for Bayesian Semiparametric Survival Analysis

Emily Owens Pickle: PhD Epidemiology (2023-)

Shiny Drew: PhD Health Promotion Education and Behavior (2023-)

Deeksha Gupta: PhD Health Promotion, Education and Behavior (2022-)
Impact of social determinants of health interventions on diabetes-related health outcomes and health service use

Reston Hartsell: PhD Epidemiology (2022-)

Sarah Sellers: PhD Environmental Health Sciences (2021-)

Jameson Sofge: PhD Epidemiology (2021-)

Yizeng Li: PhD Statistics (2023-2024)
Bayesian Non-Parametric Models for Pooled Data

Yanan Zhang: PhD Biostatistics (2022-2023)
A non-parametric factor model with variable selection under non-normal distribution

Gabriel Benavidez: PhD Epidemiology (2022-2023)
Insurance status and cancer staging, time to treatment and mortality: Examining cancers of the breast, colon and lung
Winner of the ASPH Graduate Student Achievement award

Lidia Gual Gonzalez: PhD Epidemiology (2021-2023)
Multilevel description of spotted fever group Rickettsia among humans, animals and the environment in Miraflores Colombia and South Carolina, USA

Katie Lynn: PhD Epidemiology (2021-2023)
A cross-sectional analysis of causes of congenital morbidity and mortality in Central America: TORCH El Salvador

Chung-Li Wu: PhD Biostatistics (2021-2022)
Topics in multilevel mediation analysis

Kyndall Braumuller: PhD Epidemiology (2020-2022)
Unearthing an emerging neglected bacterial disease: Evidence of spotted fever group Rickettsioses in El Salvador, 2022
Winner of the ASPH Doctoral Student Achievement Award

Michael Stutz: PhD Statistics (2020-2021)
Regression methods for group testing data

Doctoral students: Clemson University

Committee Member

Nakisha Fouch: PhD Wildlife and Fisheries Biology (2020-2022)
Green on the map: The influence of conservation easements on the naturalness of landscapes in the United States

Master's Students: University of South Carolina

Committee Chair

Vincent Onyame: MS Biostatistics (2024-)

Reid DeMass: MS Biostatistics (2022-2023)
Detecting spatially varying coefficient effects with conditional autoregressive models: A simulation study using social determinants of health screening data
Winner of the Department of Epidemiology and Biostatistics Outstanding Masters Student award

Laasya Velamakanni: MS Biostatistics (2022-2023)
A Bayesian spatial scan statistic for normal data

Nadeesha Vidanapathirana: MSPH Biostatistics (2020-2021)
A comparison of spatial clustering assessment methods

Committee Member

Allison Hughes: MS Epidemiology (2024-)

Sean Sweeney: MS Epidemiology (2023-2024)
Knowledge, Attitudes and Practices Regarding Sexually Transmitted Infections in South Carolina: A Cross-Sectional Study

Hannah Dice: MS Epidemiology (2023-24)
An Association Study on Autoimmune Diseases and Lymphoma Risk in Cases Compared to Non-Cancer Controls Using the UK Biobank

Deja Best: MS Environmental Health Sciences (2021-2023)
Infection Intensity and Prevalence from Perkinsus Marinus in the Eastern Oyster, Crassostrea Virginica (GMELIN 1791) and their Association with Salinity, Temperature, and Sex in South Carolina Estuaries

Danielle Johnson: MPH Epidemiology (2021-2022)
Utilization of remote sensing to analyze Aedes mosquito egg abundance with combined weather variables in two southeastern coastal cities

Nyrobi Tyson: MPH Epidemiology (2020-2022)
Association between postpartum weight retention and the dietary inflammatory index

Nicole Nasrallah: MSPH Biostatistics (2021)
Correcting for measurement error in the outcome when estimating the distribution of time to pregnancy with the current duration approach

Ummay Anika: MSPH Biostatistics (2019-2020)
A simulation-based study of location-shift models under non-normal conditions

Professional Involvement

External Service

South Carolina Chapter of the American Statistical Association

Chapter Representative: 2023-2024

President: 2022-2023

Vice President: 2021-2022

Treasurer: 2019-2021

Provided forecasts of the number of COVID-19 patients to Prisma Health: 2020-2021

Peer Review Activities

Ad hoc reviewer for NIH NHLBI Mentored Patient-Oriented Research Review Committee (MPOR) Study Section: 2025

Ad hoc reviewer for the NIH Transmission of Vector-Borne and Zoonotic Disease (TVZ) Study Section: 2024

Early career reviewer for the NIH Transmission of Vector-Borne and Zoonotic Disease (TVZ) Study Section: 2023

Abstract reviewer for the Prisma Health Research Showcase: 2022, 2024

Served as a judge for the South Carolina Chapter of the American Statistical Association's Student Research Presentation Contest: 2021, 2022, 2023

Served as a judge for the Southern Regional Council on Statistics Student Research Poster Contest: 2023

Member of the American Society of Nutrition's Statistical Review Board, 2023-present

Ad hoc reviewer for *Statistics in Medicine*, *Eurosurveillance*, *Communications in Medicine*, *Annals of Epidemiology*, and *PLOS ONE*

Institutional Service

Open Rank Faculty Position Big Data Health Science Center Search Committee member: 2024-2025

Bridge to Faculty Search Committee member: 2023

Assistant Professor of Biostatistics Position Search Committee Member: 2021-2022, 2022-2023, 2023-2024, 2024-2025

Co-organizer of the departmental seminar for Epidemiology and Biostatistics: 2020-2022

Member of the Biostatistics Admissions Committee: 2019-present.

Provided forecasts of the number of COVID-19 cases on campus to The Future Planning Group: 2020-2021

Secretary of the Clemson Chapter of the Association for Women in Mathematics: 2016-2017.

Co-Treasurer of the Clemson Chapter of the Association for Women in Mathematics: 2015-2016.

Honors and Awards

Certificate of Meritorious Service, University of South Carolina, 2020

Outstanding Graduate in Discovery Award, College of Science, Clemson University, April 2019.

Outstanding Graduate Research Award, School of Mathematical and Statistical Sciences, Clemson University, April 2019.

Georgia Statistics Day: Outstanding Student Poster Award, Honorable Mention, October 2018.

American Statistical Association South Carolina Chapter Outstanding Presentation Award, SCASA, March 2018.

Personal Enrichment Grant, The Graduate School, Clemson University, November 2017.

Outstanding MS Student Award, Clemson University, 2016.

R.C. Edwards Fellowship, The Graduate School, Clemson University, 2014.

Furman University Scholarship Cup, Furman University, 2014.

DeLany Medal in Mathematics, Mathematics Department, Furman University, 2014.

Mathematics Faculty Award for Excellence, Mathematics Department, Furman University, 2014.

Member of Phi Beta Kappa Honors Society, Gamma Chapter, Furman University, 2013-2014.

Best Student Presentation Award, MAA: Southeastern Section, 2014.

Media Interviews

SC likely to exceed coronavirus projections by Saturday. Here's Why. The Island Packet. Print Interview, April 8, 2020.

Is SC's curve plateauing? It's too early to tell, but masks help. WIS News Columbia. Print Interview, August 1, 2020.

Experts say SC COVID-19 cases may be on decline, but school starting could set us back. WIS News Columbia. Print Interview, August 12, 2020.

The fall surge has definitely started: Hospitals prepare for increase in COVID-19 cases. WIS News Columbia. TV Interview, November 11, 2020.